Project Title: Website Traffic Analysis using IBM Cognos

Objective:

The main objective of this project is to analyze website traffic data to gain insights into user behavior and patterns, utilizing IBM Cognos for visualization. Through the analysis of daily website visitor data, we aim to identify peak traffic periods, popular pages, and user engagement trends in order to optimize the website's performance and enhance the user experience.

Dataset:

The dataset used for this analysis was sourced from Kaggle. It contains detailed information about daily website visitors, including the date and corresponding visitor metrics.

Dataset Source:

The dataset can be accessed at [Kaggle - Daily Website Visitors Dataset](https://www.kaggle.com/datasets/bobnau/daily-website-visitors).

Preprocessing Steps:

1. Loaded the dataset using the provided URL.

2. Conducted initial exploration to understand the structure and attributes of the dataset.

3. Handled missing values by employing appropriate techniques such as data imputation or dropping rows.

4. Cleaned the dataset to ensure consistency and accuracy in the analysis.

Exploratory Data Analysis (EDA):

1.Analyzed the distribution of daily website visitors.

2.Explored correlations between visitor metrics and other relevant parameters.

3.Identified any anomalies or outliers within the dataset.

Visualization using IBM Cognos:

Utilized IBM Cognos to create interactive and informative visualizations, including but not limited to:

1.Time series analysis of daily website visitors.

2.Comparative analysis of visitor metrics for different website pages.

3.Geographic analysis of user traffic, if applicable.

Analysis and Interpretation:

1. Determined peak traffic periods and dates to inform strategic decision-making.

2. Identified the most visited pages or sections of the website.

3. Analyzed trends in user engagement over the analyzed period.

Conclusion:

Based on the analysis, valuable insights were gained into the website's traffic patterns and user behavior. These insights can be utilized to make informed decisions for optimizing the website's performance, improving user engagement, and enhancing overall user experience.